

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L.Ch 21, §§26-53),

Alden Research Laboratory, Inc.

is authorized to discharge from a facility located at:

**30 Shrewsbury Street
Holden, MA 01520-1843**

to the receiving water named:

Chaffins Brook, Nashua River Watershed

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on date of signature.

This permit and the authorization to discharge expire at midnight on June 30, 2011.

This permit supersedes the permit issued on November 1, 2001.

This permit consists of 7 pages in Part I including effluent limitations, monitoring requirements and 27 pages in Part II including General Conditions and Definitions.

Signed this 17th day of July, 2006

/s/ SIGNATURE ON FILE

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge effluent from outfalls serial number 001. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
		<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow ¹	gallons per day	100,000	----	Report	Daily ²	Estimated
Rhodamine WT Dye	µg/l	Report	----	10	1/week ²	Grab
pH (See Part I.A.1.b.)	S.U.	----		See Part I.A.1.b. Page 3	1/week ²	Grab
Food Coloring	----	----	----	See Part I.A.1.d. Page 3		

Footnotes:

1. For flow, report total flow used for each operating date.
2. Measurement is necessary only during operations.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge effluent from outfalls serial number 002. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
		<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow ¹	gallons per day	100,000	----	Report	Daily ²	Estimated
Rhodamine WT Dye	µg/l	Report	----	10	1/week ²	Grab
pH (See Part I.A.1.b.)	S.U.	----		See Part I.A.1.b. Page 3	1/week ²	Grab
Food Coloring	----	----	----	See Part I.A.1.d. Page 3		

Footnotes:

1. For flow, report total flow used for each operating date.
3. Measurement is necessary only during operations.

Part I.A.1. (Continued)

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The pH shall be in the range of 6.5 through 8.3 standard units but no more than 0.5 units outside of the background range. There shall be no change from background conditions that would impair designated uses.
- c. These waters shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to this inland water, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.
- d. These waters shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to this inland water.
- e. These waters shall be free from oil and grease, petrochemicals and other volatile or synthetic organic pollutants.
- f. These waters shall have no taste or odor other than of natural origin.

Part I.B.

All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):

- (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (a) One hundred micrograms per liter (100 µg/l);
 - (b) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (c) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.

- (2) That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (a) Five hundred micrograms per liter (500 µg/l);
 - (b) One milligram per liter (1 mg/l) for antimony;
 - (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (d) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
- (3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

Part I.C.

Alden Research Laboratory, Inc. must provide adequate notice to the Director of any substantial change in the volume or character of pollutants being discharged by Alden Research Laboratory. Information shall include:

- a. The quantity and quality of effluent introduced into Alden Research Laboratory, Inc.'s discharge; and
- b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from Alden Research Laboratory, Inc.

Part I.D. TOXICS CONTROL

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

Part I.E. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Part I A.1. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (twenty-four hour reporting).

Part I.F MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency address for all reports is:

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Central Regional Office
627 Main Street
Worcester, MA 01608

Signed and dated Discharge Monitoring Report Form(s) and all other reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

Part I.G. STATE PERMIT CONDITIONS

1. This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43.
2. Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as a NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.